IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION of:
    EINAMO, Kari

Application No.: 09/762,922

Filed: February 14, 2001

Title: TRACING OF SIGNALING MESSAGES

Confirmation Number: 1058

Group Art Unit: 2617

Examiner: CHO, Un C.

ARGUMENTS SUBMITTED WITH PRE-APPEAL BRIEF CONFERENCE REQUEST

MS AF
Commissioner for Patents
P.O. Box 1450
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Sir:

In response to the Final Office Action dated April 2, 2009, and concurrent with the "Notice of Appeal", "Pre-Appeal Brief Conference Request", and Petition for 3-Month Extension of time concurrently filed herewith, Appellant submits the following arguments for consideration by the Appeal Conferees. Claims 1-20 are pending, and claims 1, 7, 10, 13, 18 and 20 are independent.

I.   REJECTIONS TO BE REVIEWED UPON APPEAL

A.   ***Unpatentability rejections*** of claims 1-5, 7-8, 10-11, 13-14, and 16-20 under 35 U.S.C. §103(a), as allegedly being unpatentable over Wang et al. (US6,009,321).

B.   ***Unpatentability rejections*** of claims 6, 9, 12, and 15 under 35 U.S.C. §103(a), as allegedly being unpatentable over Wang et al. in view of Clarke et al. (US5,793,752).

Due to page limits of this Request, the Arguments presented herein to overcome the unpatentability rejections are directed ***only*** to the alleged unpatentability of independent claims 1 and 7. Similar arguments pertain to the rejection of each of the remaining dependent claims 10, 13, 18, and 20, and each of the dependent claims 2-6, 8-9, 11-12, 14-17, and 19. Additional arguments will be presented for each remaining independent claim in the event that an Appeal Brief should become necessary. The Appeal Conferees are respectfully requested to extend the arguments presented to the remaining independent claims that are not explicitly addressed herein.

II.   ARGUMENTS

A.   **Wang does not teach or suggest all the limitations recited in independent claims 1, 7, 10, 13, 18 and 20**.

Specific deficiencies of Kim with respect to independent claims 1 and 7 are discussed below. Even assuming, *arguendo*, that Clarke teaches that for which the Examiner asserts, a point on which Appellant

does not necessarily agree, Wang does not teach or suggest all the claimed limitations of independent claims 1, 7, 10, and 13 from which claims 6, 9, 12 and 15 variously depend, as discussed above. Accordingly, the unpatentability rejection of claims 6, 9, 12 and 15 should also be withdrawn without recourse to the additional patentable features recited therein.

### 1.	Independent Claim 1

The applied art, Wang, either alone or in combination, does not disclose, teach, or suggest a method that includes, *inter alia*, "…*receiving a trace command in said functional entity, the command identifying at least one subscriber whose signaling messages are to be traced and indicating a tracer to which information obtained during tracing is sent*; starting tracing in the functional entity, wherein said tracing comprises *sending to the tracer a copy of a signaling message related to the subscriber to be traced* in response to receiving or transmitting the signaling message in the functional entity, *wherein the copy of the signaling message sent to the tracer is identical to the signaling message of the subscriber*," as recited in independent claim 1 (*emphasis* added)..

### 2.	Independent Claim 7

Further, Wang, either alone or in combination, does not disclose, teach, or suggest a mobile communication system that includes, *inter alia*, "…operating means for giving instructions to the at least one network element, *wherein the operating means are arranged to give a trace command to the network element*, the command identifying at least one subscriber whose signaling messages are to be traced and indicating a tracer to which information obtained during tracing is sent, *the network element is arranged* to be responsive to the trace command, and *to send to the tracer a copy of a signaling message related to the subscriber in response to the network element receiving or transmitting the signaling message, wherein the copy of the signaling message sent to the tracer is identical to the signaling message related to the subscriber*," as recited in independent claim 7 (*emphasis* added).

### B.	Discussion of the Deficiencies of Wang

As admitted by the Examiner in the Final Office Action, Wang is deficient in several ways with respect to limitations variously found in each of the independent claims 1, 7, 10, and 13. The Examiner previously relied upon the now-withdrawn and discredited Kalmanek '662 reference to overcome the admitted deficiencies of Wang, but now, surprisingly, finds all the recited limitations in Wang. Appellant respectfully traverses the rejection.

In this regard, the Examiner admitted **over two years ago** at the top of page 3 of the Office Action Mailed May 7, 2007 (when a discredited and withdrawn Kalmanek reference was also relied upon by the Examiner for rejection) that Wang does not teach or suggest "receiving a trace command in said functional entity, the command identifying at least one subscriber whose signaling messages are to be traced and indicating a tracer to which information obtained during tracing is sent; starting tracing in the functional entity, which tracing comprises sending to the tracer a copy of a signaling message related to the subscriber to be traced in response to receiving or transmitting the signaling message of the subscriber…[i]n an analogous art, Kalmanek remedies the deficiencies of Wang…." Kalmanek is no longer a part of the rejections, and Wang has taken on new life.

Wang discloses that, for every phone call attempting to terminate to a wireless telephone, an MSC in an originating network extracts information from the call set up signaling, and sends this extracted information to an HLR associated with the MSC. The HLR generates a log for the information, the log being stored or displayed. Wang emphasizes that the log needs to be generated for every subscriber, and therefore there is no need in Wang to identify a subscriber. Further, Wang teaches that only some calls are traced and if the call is to be traced, the extracted information may be processed. Thus, a log is created also for calls that are not traced.

In other words, *no trace command is sent in Wang, since each MSC is configured to detect all call attempts, and for each call attempt, to extract certain parameters and send them to the HLR regardless of whether or nor the call is to be traced*.

Further, *Wang teaches tracing call related information, not signaling messages*. Therefore *any claimed feature relating to the trace command is clearly not disclosed in Wang*. Additionally, Wang teaches that the information is extracted regardless whether or not the call is traced; the tracing decision is performed in Wang afterwards.

In addition, Wang teaches that, if the call is to be traced, a device retrieves the stored information; the HLR does not perform anything during tracing. In other words, by teaching that information is sent to the HLR, *Wang teaches that no information is sent to a tracer*. That clearly is contrary to what is claimed in each of the independent claims.

Furthermore, Appellant shares the Examiner's long-held view that Wang fails to disclose that a copy of the signaling message sent to the tracer is identical to the signaling message of the subscriber. However, in recognition of this deficiency of Wang, *the Examiner erroneously asserts that one of ordinary skill in the art understands that extracted information is identical to the transmitted*

information. Applicants traverse this overreaching mischaracterization of the applied art, and the ignoring of Appellant's explicit claim language.

In response to Appellant's previous arguments, the Examiner asserts that information used to initiate the call between the called and calling party is identical to information stored in HLR. However, the information stored in HLR does not contain the whole signaling message carrying the information between the called and culling party, and therefore *the HLR in Wang does not receive a copy of the signaling message*. As a matter of fact, Wang contrarily teaches *not* to send a copy of the signaling message, but *instead* to extract some parameters from the signaling message and *only* send the extracted parameter.

Thus, no information on what the signaling message was and how the copied information was placed in the signaling message is passed in Wang, whereas sending a copy of the signaling message as in each claim on appeal also reveals them. In this regard, *Wang actually teaches away from the various recitations of sending a copy of a signaling message by teaching that there is no need to copy the signaling message, and that copying of only some parameters in the message is sufficient to trace a call*.

Further, extracting parameters from a message, and sending the extracted parameters clearly teaches that a copy of the message is not sent; but that only part of the information in the message is copied and sent. Although the extracted parameters transmitted to the HLR in Wang *may be* identical to the information transmitted between the calling party and the called party, *information extracted from* a signaling message *is clearly not identical to* the whole signaling message.

The Examiner also appears to have ignored arguments relating to the recited features "receiving a trace command in a functional entity", and "trace command identifying at least one subscriber and indicating a tracer".

The Examiner seem to consider that the HLR in Wang corresponds to the claimed tracer, and that the MSC in Wang corresponds to the claimed functional entity. To the contrary, Wang teaches at col. 2, lines 39-62 that MSCs are responsible for completing calls and the intelligent network facilitates roaming. That discussion clearly fails to teach or suggest "transmitting and receiving signaling messages in a functional entity for subscriber mobility management", if the MSC is viewed as corresponding to the functional entity.

Further, col. 2, lines 53-64 teaches that "a routine is used for every phone call attempting to terminate to a wireless telephone". Using a routine does not teach or suggest "receiving a trace command in

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said functional entity". More precisely, Wang teaches that, in response to receiving a call set up request to a wireless telephone in an MSC, the performance of steps 102 and 104 of FIG. 2 of Wang is triggered. For a person with skill in the art, a call set up request is not a trace command. Further, the call set up request does not indicate a tracer to which information obtained during tracing is sent. Wang clearly teaches that an MSC sends extracted information to its associated HLR. However, nowhere is even hinted in Wang that the call setup request could or would contain an indication to the associated HLR. The called party number or the calling party number does not indicate the HLR, since the HLR is associated with the MSC which, in Wang, is in a roamed network, and thereby not associated with the called party number or the calling party number.

Thus, Wang clearly fails to disclose, teach, or suggest "receiving a trace command in said functional entity, the command identifying at least one subscriber whose signaling messages are to be traced and indicating a tracer to which information obtained during tracing is sent" as recited in independent claim 1, and as similarly recited in each of the remaining independent claims 7, 10, 13, 18 and 20.

III.   CONCLUSION

Based on the above arguments, the independent claims on appeal, and as a consequence, the dependent claims on appeal, are submitted as being patentable over Wang.

Accordingly, reversal of the Examiner by the Appeal Conferees and allowance of pending claims 1-20 in this Application are respectfully requested.

Date: October 2, 2009   Respectfully submitted,

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